

Воспользовавшись этим, можно было бы считать, что при подготовке публикации в «Бюллетень» и «Современный классик» не произошло со-
ст. М. М. М. М., 1949

Manufacturers of process-control systems, including control systems for the chemical and pharmaceutical industries, are invited to submit their proposals to the following address: **Process Control Systems, P.O. Box 11,000, Dallas, Texas 75221.**

1. J. J. ...
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 5. J. J. ...
 6. J. J. ...
 7. J. J. ...
 8. J. J. ...
 9. J. J. ...
 10. J. J. ...

REPORT: The collection of reports is intended for the scientific and technical personnel of scientific research institutions, plants and schools or higher education.

[illegible]

FACTORS OF ECONOMIC GROWTH AND DEVELOPMENT OF COUNTRIES

Regele, B. H., *Director of Technical Studies, U. S. Air Force, Professor, Doctor of Technical Sciences, Ye. V. Zhukovskiy and Ye. J. Pionerskiy, Engineers, Institutions of the Academy of Sciences of the USSR before by means of National Digital Computers*

Stability of One Type of Digital Systems

English, M.D., Secretary. Investigation of the Dynamic Properties of a Linear Resonator System by the Method of Experimental Frequency-Response Characteristics

University, Viterbo Graduate of Technical Education, Des Moines. President, American Association of Teachers in Technical Schools and Their Effect on the Development of Liability of Automated Electric Drive

Use of National Simulation System

69 **Improving and Lower-Power Charge Amplifiers of
Automated Electro-Drive on the Basis of Triangular Pulse**

PROBLEMS OF CLASSIFYING DATA WITH DISTRIBUTED PARAMETERS

3%
Dynamometer, at least of President Electromagnetic Pressure on
Dynamometer of Electrical-Range Induction Motors

Electronics Division Controlled According to U.S. Embassy's Release

and the Kentucky Bureau With Individual Counting Sale

Abstracts of Proceedings, Doctor of Technical Sciences. Students of Krasnoyarsk State Technical University - **Crash Landing of**

Dr. H. J. Doolittle, Director of Technical Services, and W. L. Roper, Director, are working on the development of a new type of engine with a variable compression ratio.

KAZANKINA, M.N.; MORDVINOVA, A.N., agronom-entomolog

Killing murine rodents in stacks of hay and grain. Zashch.
rast. ot vred. i bol. 5 no.9:40-41 S '60. (MIRA 15:6)

1. Nachal'nik Atkarskogo proizvodstvennogo uchastka (for
Kazankina).

(Saratov Province—Rodent control)

5/169/62/000/010/000/071
0226/0307

AUTHOR: Lordvinova, L.I.

TITLE: Absolute age determination by means of the radioactive isotope of carbon

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1962, 11, abstract 10467 (Sb. po paleogeogr. i stratigr. chetvertichn. i tretichn. otlozheniy, no. 2, L., Leningr. un-t, 1960, 125-157)

TEXT: The present state of the C^{14} method of absolute age determination is reviewed. An account is given of the physical principles developed by Libby for this method and of the results of determining the half-life of C^{14} . Radiometric methods of measuring the specific activity of carbon are described together with techniques for the preliminary preparation of samples and their chemical treatment. The comparison (by Hayes, Anderson and Arnold) of C^{14} measurement data obtained by different methods is given. Some results of the application of the C^{14} method to dating glacial formations and

Card 1/2

Absolute age determination ...

/109/02/000/010/000/071
0220/0307

archeologic objects and to determining the present sedimentation
rate are considered. 45 references.

[Abstracter's note: Complete translation]

Card 2/2 "

~~KORDYUKOVA, N. B.~~; SHAPOSHNIKOVA, E. P.; YAKHEVINA, N. A.; SHATKOV, I. I.;
YEZHKOVA, G. G.

"Epidemiological characteristics of dysentery in a rural
locality."

report submitted at the 13th A,1-Union Congress of Hygienists,
Epidemiologists and Infectionists. 1959

MENDLINA, R.S.; BOTVINNIKOVA, M.Ye.; YAKHNINA, N.Ya.; MORDVINOVA, N.B.

Clinical aspects and treatment of colienteritis. Vop.akh.mat.i
det. 4 no.6:86 K-D '59. (MIRA 13:4)

1. Iz Detskoy infektsionnoy gorodskoy bol'nitsy No.12 Moskvy.
(INTESTINES--DISEASES) (ESCHERICHIA COLI)

17(2,6)

SOV/16-60-3-32/37

AUTHORS: Yakhina, N.A., Shatrov, I.I., Mordvinova, N.B., Kuznetsova, N.S.,
Shaposhnikova, R.P., Shi'man, E.A., Kazachina, K.N., Perova, L.V.,
Salamandra, E.G., Sinay, A.Ya., Sherishevskaya, Ye.F., Shabad, A.T.,
Golubeva, T.V.

TITLE: The Biological Properties of Shigella Dysenteriae, Isolated From
Different Clinical Forms of Dysentery. Author's Summary.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 3,
pp 128 (USSR)

ABSTRACT: The authors made a study of various strains of Shig. dysenteriae
isolated from patients with different clinical forms of dysentery, ✓
checking the strain's ability to cause experimental keratocon-
junctivitis in guinea pigs, its virulence for mice and its sensitivity
to antibiotics. No essential differences were found between the strains,
which bears out the great part played by the state of the macroorganism
in determining the nature of the clinical course in dysentery.

Card 1/2

SOV/16-60-3-32/37

The Biological Properties of Shigella Dysenteriae, Isolated From Different Clinical Forms of Dysentery. Author's Summary.

ASSOCIATION: Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR
(Institute of Epidemiology and Microbiology imeni Gamaleya of the
AMN, USSR); Moskovskaya gorodskaya i rayonnaya sanitarno-
epidemiologicheskaya stantsiya (Moscow City and District Sanitary
and Epidemiological Station).

SUBMITTED: December 24, 1958

Card 2/2

YAKHININA, N.A., kand.med.nauk; SHATROV, I.I., doktor med.nauk; MORDVINOVA, N.B.

Escherichia coli enteritis in infants; survey of the literature
on etiology, epidemiology, and pathogenesis. Vest.AMN SSSR 15
no.4:62-74 '60. (MIRA 14:5)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(DIARRHEA) (ESCHERICHIA COLI)

KABANOVA, Ya.A.; MORDVINOVA, N.E.; KUZNETSOVA, N.S.; MINDLINA, R.S.;
BOTVINNIKOVA, M.Ye.; MIKHAYLOVA, Yu.M.

Result of the use of luminescent sera in the diagnosis of
dysentery and colienteritis. Zhur.mikrobiol.epid.i immun. 31
30-35 R '60. (MIRA 14:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR, 12-y gorodskoy detskoy infektsionnoy bol'nitsy i I Moskov-
skogo meditsinskogo instituta.
(DYSENTERY) (ESCHERICHIA COLI) (SERUM)

BUROVA, T.V.; YAKHININA, N.A.; SHATROV, I.I.; MORDVINOVA, N.B.;
KUZNETSOVA, N.S.

Carriage of dysenterial bacilli by children. *Pediatrics* no.5:70-
75 '61. (MIRA 14:5)

1. Iz otdela ostrykh detskikh infektsiy (zav. - prof. B.G. Shirvindt) Nauchno-issledovatel'skogo pediatricheskogo instituta Ministerstva zdravookhraneniya RSFSR (dir. - doktor med. nauk A.P. Chernikova, zam. dir. po nauchnoy chasti - prof. N.R. Shastin) i otdela epidemiologii (zav. - prof. T.Ye. Boldyrev) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR (dir. - prof. S.N. Muromtsev).
(DYSENTERY)

BAROYAN, O.V., prof., red.; KABANOVA, Ye.A., red.; MORDVINOVA, N.E.,
red.; SHATROV, I.I., red.; SHEVTSOV, D.G., red.; YAKHININA,
N.A., red.; KARON, I.I., red.; CHULKOV, I.F., tekhn. red.

[Coli-enteritis] Kolienterity. Moskva, Medgiz, 1962. 97 p.
(MIRA 16:2)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for
Baroyan).

(INTESTINES--DISEASES) (ESCHERICHIA COLI)

YAKHININA, N.A.; SHATROV, I.I.; MORDVINOVA, K.B.; MARKUS, V.D.;
KHOMITSKAYA, T.A.; MINDLINA, R.S.; BOTVINNIKOVA, M.Me.

Inoculation of pathogenic agents and the epidemiological
significance of patients with colienteritis at various
stages of the disease. Zhur. mikrobiol., epid. i immu.
33 no.1:80-83 Ja '62. (MIRA 15:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR, Peditricheskogo instituta AMN SSSR i 12-y gorodskoy
detskoy infektsionnoy bol'nitsy.

(ESCHERICHIA COLI)
(INTESTINES—DISEASES)

USSR / Human and Animal Morphology (Normal and Pathological). General Problems.

S

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 12213

Author : Mordvinova, K. M.

Inst : Omsk Medical Institute

Title : On the Problem of the Structure of the Neurovascular Sheaths of the Shin.

Orig Pub : Tr. Omskogo med. in-ta, 1957, No. 23, 58-67

Abstract : It was shown horizontal sections of 20 shins (S) of adult humans of both sexes that the anterior neurovascular bundle (NVB) in the upper 2/3 of the S does not have an independent fascial sheath (SH) but in the lower third, in 50% of cases, has one. The posterior NVB in the upper third of S runs closer to the fibula but, in the lower 2/3 of S, runs closer to the tibia. Along the entire

Card 1/2

L 20050-55 EPT(c)/EPT(n)-2/EPT(m)/EPA(bb)-2/T Pr-4/Pu-4 AEDC(a)/AEDC(b)/
AEDC(c)/SSD/SSD(a)/AFWL/ASD(p)-3/ESD(l)/ESD(ei) DM
ACCESSION NR: AP4049535 S/0089/64/017/005/0349/0359

AUTHORS: Afrikantov, I. I.; Mordvinov, N. M.; Novikov, I. D.;
Polonikh, B. G.; Sledzyuk, A. K.; Khlopkin, N. S.; Tsarev, N. M. 8

TITLE: Operating experience with the atomic installation of the
"Lenin" ice breaker 19

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 349-359

TOPIC TAGS: nuclear power system, reactor shutdown, reactor start
up, nuclear propulsion

ABSTRACT: The icebreaker covered some 60,000 miles since its com-
missioning, of which 40,000 miles were in ice. The reactors operate
at present with their second fuel charge. Each reactor delivered
from its first charge 430--490 thousand MW-hr of thermal energy in
more than 11,000 hours. The average yield was 13,000 MW-day/ton of
uranium, with the maximum reaching 30,000. The reactors operated

Cord 1/2

L 20052-65

ACCESSION NR: AR4039377

of compressors in the experimental engine 2DN-53 (65 hp at 1600 rpm). The design incorporates a RUTA type compressor and an Eboshpekhar gas turbine compressor. A nomogram was plotted for combined operation of the compressors at typical speeds, i.e. 1600 and 1000 rpm. Efficiency cumulates in parallel coupled compressors, while for tandem coupling it depends on the point at which the total resistance line intersects with the compressor curve. It is shown that the gas turbine compressor exerts significant resistance to the flow of air at low load levels and begins to operate efficiently only above engine loads which insure compressor speeds of 10,000 rpm. Up to 60% of the pressure generated by a gas turbine compressor is lost at high load levels to overcome the resistance offered by a drive actuated compressor. Air should be channeled to bypass the drive actuated compressor in the latter case. One illustration. P. Shelest.

SUB CODE: PR

ENCL: 00

Card 2/2

1. 8826-55 EHT(1)/EPA(0)/EWT(m)/T/TCB(k)/EWA(1) Pd-4/Pi-4 AFETR/AFWI
AECG(a)/LEDT(r)/BSD/SSD/AS(mp)-2/ASD(4)/AFTE(a)/ESD(gg)/SSD(1) BM
ACCESSION NR: AP4044459 S/0043/64/000/003,0089/0102

AUTHOR: Ginzburg, I. P.; Kocheryzhenkov, G. V.; Mordvinov, N. I.

TITLE: A turbulent boundary layer on a permeable plate

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 3, 1964, 89-102

TOPIC TAGS: turbulent boundary layer, boundary layer permeable plate, mass transfer, heat transfer, skin friction, diffusion, compressible gas flow

ABSTRACT: The effect of mass transfer on compressible, turbulent-boundary-layer skin friction and on heat transfer when mass is injected into or withdrawn from the layer normal to the surface of a permeable plate is studied for arbitrary constant Prandtl and Lewis numbers. Investigations were carried out on the basis of a semiempirical theory of turbulence by means of a two-layer method proposed by I. P. Ginzburg. Steady flow of a thermodynamically ideal gas is considered in the presence of diffusion and in the absence of inertial forces, heat emission, and chemical reactions. The effect of thermal diffusion is neglected. Formulas expressing relations between total
Cord 1/2

1 2226 09

ACCESSION NR: AP4044459

enthalpy and velocity, mass concentration of the components of a binary mixture and velocity, and shear stress and layer thickness are derived. Expressions for determining velocity and temperature profiles and evaluating the effect of injection on the skin-friction coefficient are established. The results of calculation made by this method agree with available experimental data. Orig. art. has: 1 figure and 80 formulas.

ASSOCIATION: none

SUBMITTED: 03Jun63

ATD PRESS: 3100

ENCL: 00

SUB CODE: ME, AS

NO RIF SOV: 007

OTHER: 000

Card 3/2

GINZBURG, I.P.; KOCHERYZHENKOV, G.V.; MORDVINOVA, N.I.

Turbulent boundary layer on a permeable plate. Vest. LGU 19
no.13:89-102 '64 (MIRA 17:8)

MORDVINOVA, N. P.

"The Influence of Pentothal Narcosis on the
Function of the Liver," Khirurgiya, No. 1,
1948. Biochem. Lab., Central Inst. Traumatology
& Orthopedics, Min. Health, -c1948-.

NORDVIKOVA, N. P.

NORDVIKOVA, N. P. -- "Pentothal (Tioental) Narcosis and Its Effect on Liver Function." Sub 5 Feb 52, Central Inst for the Advanced Training of Physicians. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January-December 1952

EXPERIMENTAL
MOEDVINOVA, N.P.; TSYBUL'SKIY, I.B.; GARVEY, H.M.

Clinical and experimental use of drugs for the treatment and prevention of skin injuries caused by radiation [with summary in English]. Vest.rent. i rad. 32 no.3:14-19 Vy-Je '57. (MERA 10:10)

1. Iz radiologicheskogo otdela (zav. - prof. A.V.Kozlova) Tsentral'nogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. - dotsent I.G.Lagunova)

(RADIATION PROTECTION)

aloe juice, methylated linolenic acid prep. & texan, prev. of radiation skin injuries in animals & man)

(CATHARTICS, eff.

aloe juice, prev. & ther. of radiation inj. of skin in animals & man)

(VITAMIN. F, eff.

methylated linolenic acid prep., prev. & ther. of radiation inj. of skin in animals & man)

KORDVINOVA, K.P., ROSTOTSKIY, B.K., ALESHKINA, Ya.A.

Prevention and treatment of cutaneous lesions in radiotherapy of malignant tumors [with summary in English]. Vest. rent. i rad. 33 no.3:37-40
 Ky-Je '58 (MIRA 11:8)

1. Iz radiologicheskogo otdeleniya (zav. prof. A.V. Kozlova) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii Ministerstva zdoravookhraneniya RSFSR (dir. - dotsent I.G. Lagunova) i Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticeskikh rasteniy (dir. - kand.sel'skokhozyaystvennykh nauk N.Ye. Itakov).

(CATHARTICS, ther. use,

Aloe in skin dis. caused by radiother. of cancer of various organs (Rus))

(RADIATION PROTECTION,

by Aloe, prev. of skin lesions in radiother. of cancer of various organs (Rus))

(SKIN, eff. of radiations,

radiother. induced lesions in cancer of various organs, prev. by Aloe (Rus))

MORDVINKOVA, M.F.; MOSTOTSKIY, B.K. (Moskva)

Results of tests of some drugs proposed for the prophylaxis
and treatment of radiodermatitis. Vrach.delo no.3:297-298
Mr '59. (MIRA 12:6)

1. Radiologicheskii otdel (zav. - prof.A.V.Kozlova) nauchno-
issledovatel'skogo rentgeno-radiologicheskogo instituta MZ
RSFSR i Vsesoyuznyy nauchno-issledovatel'skiy institut lekar-
stvennykh i aromaticeskikh rasteniy.

(RADIATION PROTECTION) (SKIN--WOUNDS AND INJURIES)
(PHARMACOLOGY)

ROSTOTSKIY, B.K.; ALESHKIN, Ya.A.; MORDVINOVA, N.P.

Aloe emulsion as a means of preventing and treating skin injuries
following radiation therapy. Trudy VILAR no. 11:301-309 '59.

(MIRA 12:2)

(ALOE—THERAPEUTIC USE) (RADIATION—TOXICOLOGY)
(SKIN—WOUNDS AND INJURIES)

MOEDVINOVA, N.P. (Moskva, Kropotkinskaya ul., d.38, kv.10)

Trophic changes in irradiated tissues. Vest.rent.i rad. 34 no.6:
58-62 N-D '59. (MIRA 13:5)

1. Iz radiologicheskogo otdela (zav. - prof. A.V. Koslova) Gosu-
darstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo
instituta (dir. - dotsent I.G. Lagunova).
(RADIATION EFFECTS)

MEKOVA, M.A. (Moskva, ulitsa Usacheva, dom 19-a, korp.1, kv.45);
 MOROVINOVA, N.P.; GOLLAND, N.B.

Late results of the treatment of myasthenia gravis by irradiation
 of the thymus with X rays and of the resulting radiation ulcer.
 Vest.rent.1 rad. 35 no.1:45-47 Ja-F '60. (MIRA 13:6)

1. Iz radiologicheskogo otdela (rukovoditel' - prof. A.V. Konlova)
 Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta
 Ministerstva sdravookhraneniya RSFSR (dir. - dotsent I.G. Lu-
 gunova), kafedry luchevoy bolezni (sav. - prof. A.V. Konlovu)
 Tsentral'nogo inatituta usovershenstvovaniya vrachey (dir. N.D.
 Kovrigina) i Instituta nevrologii AMN SSSR (dir. - deyatel'-
 nyy chlen AMN SSSR prof. N.V. Kononov).
 (MYASTHENIA GRAVIS radiother.)
 (THYMUS GLAND radiation eff.)
 (RADIOTHERAPY compl.)

MORDYKOVA, H.P. - ROSTOTSKIY, B.K.

Comparative evaluation of the effect of an emulsion from the juice of *Aloe arborescens* and *Aloe striatula* in preventing radiation injuries. Med.rad. no.11:16-20 '61. (MIRA 14:11)

1. Iz radiologicheskogo otdeleniya Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdorookhraneniya RSFSR i otdela khimii Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticeskikh rasteniy.

(RADIATION PROTECTION) (ALOE)

KOZLOVA, A.V.; ZAYBAT'YANTS, V.B.; MORDVINOVA, N.P.; TSYBUL'SKIY, I.E.

Study of some aspects of the pathogenesis of radiation skin
injuries. Med.rad. no.1:16-21 '62. (MIRA 15:1)

1. Iz radiologicheskogo otdela (rukovoditel' - prof. A.V.
Kozlova) Gosudarstvennogo nauchno-issledovatel'skogo rentgene-
radiologicheskogo instituta Ministerstva zdoravookhraneniya
RSFSR.

(SKIN—RADIOGRAPHY) (RADIATION SICKNESS)

SAVCHENKO, Ye. D.; GARVEY, E. N.; MORDVINOVA, N. P.

Clinical morphological comparisons in the surgical method of
treating radiation injuries. Med. rad. no. 4:47-53 '62.
(MIRA 15:6)

1. Iz radiologicheskogo otdela (sav. - prof. A. V. Kozlova) i
otdela eksperimental'noy patologii (sav. - dotsent Ye. D. Sav-
chenko) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdoravookhraneniya RSFSR.

(RADIATION SICKNESS) (~~SKIN~~ SURGERY)

KARIBOV, Yu.I.; MORDVINOVA, N.P.

Use of peloidin in the treatment of radiation lesion of the skin.
Med.rad. 9 no.9:27-29 S '64. (MIRA 18:4)

1. Rentgenoterapevticheskiy otdel (zav. I.A.Pereslegin) i radiologicheskiy otdel (zav. - prof. A.V.Kozlova) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdравookhraneniya RSFSR.

RYBASOV, V.; KRUGLYY, A.; MORDVINOVA, R.

The hospital is protected.... Voen. znani. 41 no.3:28-29 M- '65.
(MIRA 1815)

1949
ROMANOV, V. Meditsinskaya zhizn' (Medicine & Life,
introduced by the Leningradskiy Fabrikant). Zhizn' - 1949,
No. 6, p. 16-17.

SO: Leningradskiy Zhurnal'nykh Stat'ey, No. 12, No. 17, 1949

L 33425-66 EMT(m)/EMP(t)/ELL LD/51 SOURCE CODE: UR/0061/65/000/020/G024/G024
ACC NR. AKG012428

AUTHOR: Zaichko, L. F.; Zakharov, N. S. Mordvinova, V. D.

TITLE: Determination of antimony microconcentrations in high-purity tin by the method of amalgam polarography with accumulation

SOURCE: Ref. zh. Khimiya, Abs. 20G152

REF SOURCE: Izv. Tomskogo politekhn. in-ta, v. 128, 1964, 50-52

TOPIC TAGS: antimony, tin, ~~tin~~, electrolysis, polarography, amalgam, trace analysis, *HIGH PURITY METAL*

ABSTRACT: A method is described for determining Sb traces in high-purity tin, based on preliminary separation of Sn in the form of SnBr_4 and subsequent determination of Sb by the method of amalgam polarography with accumulation against the background of 5N H_2SO_4 + 50% ethanol. The anode peak of the Sb was observed at -0.1 v. Bi, Cu, and Sn do not interfere with determining the Sb. A 4-ml concentration of HBr + 1 ml Br_2 is used in dissolving 0.5g of Sb. The solution is evaporated to dryness in a chamber at 170C, then 1 ml 6N HCl is added to the residue, and Sb (5+) is reduced to Sb (3+) with sodium hypophosphite (10-40 ug) at 60-70C. The solution is evaporated 2-3 times after adding water.

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L 33425-66

ACC NR:AR6012428

then the electrolyte 5N H₂ SO₄ + 50% ethanol is added to the residue, and the electrolysis is carried out at -0.5 v for 15 min after which the amalgam dissolution curve is registered. G. Prokhorova.
[Translation of abstract]. [NT]

SUB CODE: 11/ SUBM DATE: 00

Card 2/2 ULR

Mordvinova, V.I.

25-7-14/51

AUTHOR: Mordvinova, V.I.

TITLE: Over the Double Barrier (Cherez dvoynoy bar'yer)

PERIODICAL: Nauka i Zhizn', 1957, # 7, p 7-10 (USSR)

ABSTRACT:

This article deals with the development of heart surgery in the USSR. Pioneer work was done by Lenin Prize Laureate Professor A.N. Bakulev, of the Institute of Chest Surgery of the Academy of Medical Sciences of the USSR, Moskva (Institut grudnoy khirurgii Akademii meditsinskikh nauk SSSR, Moskva), who had been performing heart operations on patients with heart infarction. Such operations had to be done in the shortest possible time because the patient was in constant danger of suffocating. It was not until devices for intratracheal anesthesia were constructed that operations of long duration could be performed. Professor Bakulev realized that to solve the intricate problems of curing innate or acquired heart diseases by surgery, thorough investigation, precise diagnosis and experience in the use of intratracheal anesthesia were an absolute necessity. So research work on a large scale was started with animals to find new methods. Professor Bakulev's clinic was always open to doctors who felt interested in pectoral surgery, and there the foundation was laid for successful treatment of heart diseases

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Over the Double Barrier

25-7-14/51

by clinical operation. Within the past 9 years, 47 scientific publications dealing with various problems of heart surgery were published by Professor Bakulev and his surgeon-colleagues. Hundreds of patients suffering from heart ailments were operated on with pronounced success. Nevertheless, scientific research work is continued by heart specialists all over the USSR, for the operations are still considered very complex, as they involve certain risks for the patient. Quite recently a government sponsored institute was opened in Moscow in close co-operation with Professor Bakulev. This institute will perform research work in the field of pectoral surgery. Others who will work in the clinic are Professors A.V. Gulyayev, R.V. Bogoslovskiy, A.A. Busalov, E.N. Meshalkin, V.A. Zhmur, the physicians I.A. Medvedev, E.A. Damir, S.A. Kolesnikov. This article contains one photo and four drawings.

ASSOCIATION: Institute of Chest Surgery of the Academy of Medical Sciences of the USSR, Moskva (Institut grudnoy khirurgii Akademii meditsinskikh nauk SSSR)

AVAILABLE: Library of Congress

Card 2/2

USSR / Pharmacology, Toxicology. Cardiovascular Drugs. V

Abs Jour: Ref Zhur-Biol., No 9, 1958, 42379.

Author : ~~Mordvinova, Ye. F.~~; Legchayev, V. Ya.

Inst : Smolensk Medical Institute.

Title : The Effect of Convaside on the Blood Vessels of
an Isolated Rabbit Ear with Intact Innervation
Under Conditions of Normal and Elevated Intra-
abdominal Pressure.

Orig Pub: Tr. Smolenskogo med. in-ta, 1957, 83-88.

Abstract: In rabbits, under chloroform anesthesia, the ear,
with intact innervation, was isolated by the
method of M. P. Nikolaev. Prior to this, and
without anesthesia, (through an incision in the
mid-abdominal line, 2 cm distally from the umbili-
cus) a thin rubber balloon, attached to a V shaped
manometer, was inserted into the abdominal cavity.

Card 1/2

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L 11253-66 FMT(1)/T JF

ACC NR: AR6022387 (N) SOURCE CODE: UR/0397/65/000/024/0065/0065

AUTHOR: Fel'dman, I. Kh.; Frankovskiy, Ch. S.; Yamshchikov, V. P.; ³¹
Mordvinova, Ye. T.; Maryukhta, Yu. B.; Zaikina, N. A.; Vitovskaya, G. A.;
Arkad'yeva, G. Ye.

TITLE: Azo-derivatives of benzene as potential antibacterial^b compounds.
I.

SOURCE: Ref. zh. Farmakologiya. Toksikologiya, Abs. 24.54.5.2

REF SOURCE: Tr. Leningr. khim.-farmatsevt. in-te, vyp. 18, 1955, 171-172

TOPIC TAGS: benzene, chemical compound, microorganism contamination,
bacteria, plant parasite

ABSTRACT: An in vitro method of serial dilutions was used to test the activity of several synthetic azo-compounds in relation to dermatophytes, some gram positive and gram negative bacteria and two species of yeastlike molds. All the tested azo-compounds containing a carboxylic group proved inactive. The exception was 2,4-dichlor-3-carboxy-4'-oxyazobenzol. The azo-compounds displayed highest activity in relation to Cr. neoformans, weaker activity in relation to dermatophytes, and the weakest in relation to Candida albicans. Only

Card 1/2

UEC: 615.7

L. 14253-66

ACC NR: AR6022387

certain azo-compounds displayed antibacterial and antiviral action. The highest in vitro activity was displayed by 2,4-dichlor-4'-methyl-4-oxyazobenzol and 2,4-dichlor-4'-oxyazobenzol which proved most effective in relation to yeastlike molds and dermatophytes and weakest in relation to bacteria. M. Zabolotskaya. [Translation of abstract].

SUB CODE: 06, 07

Card 2/2 *mt*

MORDVINOVA-LYUBIMOVA, N. B., Cand Med Sci -- (diss) "Focalization
of the incidence of dysentery in ~~●~~ rural localities." Mos, 1957.
16 pp (Acad Med Sci USSR, Inst of Epidemiology and Microbiology
in ~~Moscow~~ ^{Kharkov} Academician N. F. Gamaleya), 200 copies (KL, 2-58,
116)

MORDVINOVA-LYUBIMOVA, M.B.

Focal aspects of the morbidity of dysentery in rural areas. Zhur.
mikrobiol.epid. i immun. 28 no.9:71-75 S '57. (MIRA 10:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(DYSENTERY, BACILLARY, epidemiology,
focal aspects of morbidity in rural areas (Rus))

MORDVINTSEV A. V.

181T73

USSR/Metals - Aluminum, Welding

Dec 50

"Welding of Aluminum-Magnesium Alloy AMG-5,"
A. V. Mordvintsev, Engr

"Avtogen Delo" No 12, IP 13-16

Conducted expts to det best method of welding al-
base alloy contg 4.25-4.5% Mg, 0.48% Mn, 0.26%
Li and 0.34-0.37% Fe. Argon-arc welding and gas
welding are satisfactory. Argon-arc has some ad-
vantages over gas welding. Discusses results of
metallographic examn. Photomicrographs of zone
of thermal effect and welded metal.

181T73

OL'SHANSKIY, N.A., kand. tekhn.nauk; MORDVINTSKY, A.V., kand. tekhn.nauk;
KRUMBOL'DT, N.N., inzh.

Use of ultrasonics in seam and spot welding. Avtom. svar. 11 no.10:
75-80 0 '58. (MIRA 11:12)

I.Ordona Trudevego Krasnogo Znameni Institut elektresvarki im.
Ye. O. Patona AN USSR.
(Electric welding) (Ultrasonic waves--Industrial applications)

MORDVINTSKY, M.A., podpolkovnik meditsinskoy sluzhby; LEVTSOV, N.P., mayor
administrativnoy sluzhby; DYMOV, A.G., starshiy leytenant meditsin-
skoy sluzhby

Using an aerosol generator operated by compressed air for disinsectiza-
tion on ships. Voen.-med.khur. no.7:73-74 J1 '56. (MLRA 9:11)
(SPRAYING AND DUSTING EQUIPMENT)
(SHIPS--DISINFECTION)

1. MORDVINTSEV, G. G.
2. USSR (600)
4. Ensilage
7. Making silage from cereal grass waste, Korm. baza, 3, No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

MORDVINTSEV, L. A.

185T81

CHSR/Metal - Aluminum, Welding

Mar 51

"Power Sources for Argon-Arc Welding of Aluminum Alloys With a Wolfram Electrode," L. A. Mordvin-tsev, Cand Tech Sci, Ye. A. Guseva, Engr

"Avtogen Delo" No 3, pp 4-7

Expts conducted to compare dc and ac, and to clarify effect of increased idle voltage. Examd 3 devices: app for atomic hydrogen welding of AYcG type, welding transformer STE-34, and Messer-type dc mach. Obtained curves of current and voltage with aid of 3-loop oscillograph.

185T81

Call Nr: AF 1157027

AUTHOR: Mordvintsev, L.A.
TITLE: Technology of Welding, Soldering and Brazing
(Tekhnologiya svarki i payki); Practical Manual for
Designers and Technologists (Prakticheskoye posobiye
dlya konstruktorov i tekhnologov)
PUB. DATA: Gosudarstvennoye izdatel'stvo oboronnoy promyshlennosti,
Moscow, 1957, 150 pp., 8,700 copies
EDITORS: Pugachev, A.I., Candidate of Technical Sciences; Ed. in
Chief: Latynin, Ye. V., Engineer; Ed. of the Publ. House:
Kuznetsova, A.G.; Tech.Ed.: Pukhlikova, N.A.
PURPOSE: The monograph is intended for designers and technologists
without special training in welding methods but whose work
calls for design and manufacture of welded structures.
COVERAGE: The monograph describes the most widely employed methods of
welding, brazing and soldering of metals, their advantages
and shortcomings, and their fields of application. A
concise description is given of preparatory operations,
selection of a method and the technology of welding various

Card 1/4

Call Nr: AF 1157027

Technology of Welding, Soldering and Brazing (cont)

metals and alloys. Brief data on common defects and methods of weld joint quality control are included. With this manual a more intelligent selection of structure types, materials, methods and techniques of welding may be made for the design and manufacture of welded structures. Persons credited with assisting the author are Candidates of Technical Sciences: Verchenko, V.R.; Godin, V.M.; Mordvintseva, A.V.; Petran', I.V.; and Pugachev, A.I. The bibliography contains 34 references of which 33 are Soviet.

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Call Nr: AF 1157027

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Call Nr: AF 1157027

Technology of Welding, Soldering and Brazing (cont)

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AVAILABLE: Library of Congress

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AVAKOV, S.A., inzh.; MORDVINTSEV, M.N., inzh.; PROZOROVSKIY, V.N., inzh.;
SOSNOVSKIY, V.K., inzh.; KASTREBOV, N.A., inzh.

Experimental and model plants in the food industry. Mekh.i
avtom.proisv. 16 no.4:2-6 Ap '62. (MIRA 15:4)
(Food industry)

PAVLOV, Ivan Pavlovich; MORDVINITSKY, P.V.

[Guide to practical work in the organization of socialist
agricultural enterprises] *Rukovodstvo k prakticheskim zadaniyam
po organizatsii sotsialisticheskikh sel'skokhoziaistvennykh pred-
priatii.* Moskva, Sel'khozgiz, 1959. 462 p. (MIRA 13:11)
(Farm management)

SLIVKO, V.V., otv. red.; GLAZACHEV, V.V., red.; YEMEL'YANOV,
A.S., red.; ZAMORYSHEV, A.V., red.; MORDVINTSEV, P.V.,
red.; NIKITIN, Ia.M., red.; SHUBIN, M.Ye., red.;
SOKOLOVA, S.I., tekhn. red.

[Scientific Conference on the Results of Research Work
for the period from 1958 to 1959] Nauchnaya konferentsiya
po itogam nauchno-issledovatel'skoi raboty za 1958-1959
gg.; tezisy dokladov. Vologda, Vologodskoe knizhnoe izd-vo,
1960. 174 p. (MIRA 16:10)

1. Molochnoye (Vologodskaya oblast') Vologodskiy molochnyy
institut. 2. Kafedra ekonomiki i organizatsii proizvodstva
v sotsialisticheskikh sel'skokhozyaystvennykh predpriyati-
yakh i molochnoy promyshlennosti Vologodskogo molochnogo
instituta (for Mordvintsev). 3. Kafedra kormleniya sel'sko-
khozyaystvennykh zhivotnykh Vologodskogo molochnogo instituta
(for Yemel'yanov). 4. Kafedra chastnoy zootehniki Vologod-
skogo molochnogo instituta (for Zamoryshev). 5. Kafedra tekhnologii
moloka i molochnykh produktov Vologodskogo moloch-
nogo instituta (for Glazachev, Shubin).
(Vologda Province--Farm produce--Research)

BORISOV, I., prepodavatel'; MOROVINTSEV, S. (g.Krasnyy Sulin, Rostovskaya obl.); MOSKVICHEV, P. (g.Ordzhonikidze); KNYAZEV, Yu., shofer 1 klassa (g.Krasnoyarsk); SOLOVEY, A., shofer 1 klassa (g.Krasnoufimsk); IAZ'KO, M., avtomekhanik (g.Kalinin); SUKHOV, I., shofer; DAVYDOV, G. (Khersonskaya obl.)

For unified regulations for awarding drivers' licenses. Avt.-
transp. 39 no.9:48-49 S '61. (MIRA 14:10)

1. Voronezhskiy uchebnyy kombinat (for Borisov). 2. Klasskoye
avtobusnoye khozyaystvo (for Sukhov).
(Automobile drivers' licenses)

MORDVINTSEV, V.M., mekhanik.

Efficient individual protective clothing is needed.
Besop.truda v prom. 1 no.8:38 Ag '57.

(MILWA 10:8)

1.Selidovskaya rayonnaya gornotekhnicheskaya inspeksiya
Gosgortekhnadzora SSSR.

(Clothing. Protective)

WORDVINTSEV, V.K., mekhanik

Improving safety measures for hoisting machinery. Bezop. truda v prom.
2 no. 4:33 Ap. '58. (MIRA 11:4)

1. Selidovskaya rayonnaya gornotekhnicheskaya inspeksiya.
(Mine hoisting--Safety appliances)

MORDVINTSEV, Y.M.

Results of organization work. Bezop.truda v prom. 4 no.4:29 Ap '60.
(MIRA 13:9)

1. Nachal'nik Selidovskoy rayonnoy gornotekhnicheskoy inspektсии
Upravleniya Stalinskogo okruga Gosgortekhnadzora USSR.
(Mining engineering--Safety measures)

MORDVINTSEV, V.M.

Work of public inspectors. Bezop.truda v prom. 4
no.7:13 J1 '60. (MIRA 13:8)

1. Nachal'nik Selidovskoy rayonnoy gornotekhnicheskoy
inspekteii.
(Donets Basin--Mine inspection)

MORDVINTSEV, Vladislav Nikolayevich; SVET, Ye., red.;
KUZNETSOVA, O.Ya., tekhn.red.

[Struggle for steel] Bor'ba za stal'. Cheliabinsk,
Cheliabinskoe knizhnoe izd-vo, 1963. 21 p.
(MIRA 17:1)

1. Starshiy stalevar martenovskogo teekha No.2 Chelyabin-
skogo metallurgicheskogo zavoda (for Mordvintsev).

NORDVINTSEVA, A. V.

PA 4731

USSR/Welding - Strength
Joints, welded

Mar 1947

"Equal Durability of Welded Butt-joints," N. N. Prokhorov, N. V. Shiganov,
and A. V. Nordvintseva, 4 pp

"Avtogennoye Delo" No 3

Discussion with tables, microphotos and diagrams. The conclusion, among
others, is reached that the low durability of this type of welding, as shown
by statistics, is due to the imperfect form of the joints, and the presence
in them of undercuts and poor penetrations.

MORDVINTSEVA, A. V., N. N. PROKHOROV and N. V. SHIGANOV

"Mechanical Tensometer for Determination of Deformation in Bodies
During Temperature Changes" (in Russian.) Zavodskaya Laboratoriya (Factory Laboratory),
v. 13, Sept. 1947, p. 1148-49

Above apparatus is described and diagrammed and typical results obtained
with it are presented.

MORDVINTSEVA, A. V.

LOCAL ELASTIC AND PLASTIC DEFORMATIONS IN THE PROCESS OF WELDING A BEAD ON A PLATE. N. B. Shiganov, and A. V. Kori-
vintseva. (Avtogennoe Delo, 1948, No. 2, pp. 12-15). (In Russian). The results are graphically presented of experiments in which the deformation and strain were determined in plates which had been bead-welded along their edges. The plates were 10 mm. thick, and had lengths of 20, 40, 60, 80, 100 and 180 mm. It was found that for this type of process, increasing plate width up to a given limit increased the tendency to gold cracking through both increased deformation during cooling and quicker elastic-plastic deformation. The deformation was found to decrease with increasing temperature of welding when second layer was welded on. Water cooling of the weld was found to decrease the residual strain, the maximum effect being obtained when the stream of water followed the arc so as to strike the metal at a temperature of 225-275°.

Immediate source clipping

353-K. Welding of the Aluminum-Magnesium Alloy AMg-2. (In Russian: A. V. Mordvinov, *Artesonnoye Delo* (Welding), V. 21, Dec. 1950, p. 12-16.)

Feasibility of welding Al alloy sheet containing 420-430 Mg, 0.45% Mn, 0.20% Si, and 0.34-0.37% Fe by argon-arc or gas welding or by arc welding using a metallic electrode. Complete applicability of these two methods. Mechanical properties of welds obtained. (KI, KJ, AI)

ASB-5.4 METALLURGICAL LITERATURE CLASSIFICATION

KORDVINTSEVA, A. V.

"Deformation of Welded Joints in the Course of Time." Min. Higher Education USSR,
Moscow Order of Labor Red Banner Higher Technical School imeni Bauman, Moscow, 1955.
(Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

124-57-1-1260

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 173 (USSR)

AUTHOR: Mordvintseva, A. V.

TITLE: The Long-term Deformation of Welded Structures (Deformatsiya svarnykh konstruktsiy so vremenem)

PERIODICAL: Sb. statey Mosk. vyssh. tekhn. uch-shcha, 1955, Vol 37, pp 47-59

ABSTRACT: The deformation of welded parts over an extended period of time was studied on special annular specimens made of various grades of steel and with the aid of gages. The experiments showed that low-carbon and austenite steels are virtually free of long-term deformations; all structural alloy steels of the grades 23Kh2NVFA, 12Kh5MA, 20KhGSNA, 25KhGS, and 30KhGS continue to undergo deformation throughout the entire period of observation, which extended over a period of a year. In every instance the deformation develops with an increase in the volume of the metal in the region of the welded joint. It was established that the deformations develop at a fast rate at first, then continue at a slower rate, and then gradually tend toward extinction. However, the observations showed that even after two years the

Card 1/2

124-57-1-1260

The Long-term Deformation of Welded Structures (cont.)

deformations had not entirely ceased. The mechanisms observed lead to the assumption that the deformations of the welded specimens appear to be caused by the decomposition of the retained austenite which, in any conditions, is accompanied by an increase in volume. The change in dimensions due to the decomposition of the retained austenite at room temperatures was observed on hardened straight specimens of 12Kh5MA and 23Kh2NVFA steel fixed in a special apparatus. The deformations were measured by means of strain gages. These tests showed that slow cooling (in air) contributes to an increased deformation at room temperature. It was established that the deformations diminish with a decrease in the welding power per unit length. A small degree of preheating during welding will increase the subsequent deformation. When welding is done on an article clamped in a jig, the subsequent deformations are smaller. Peening of the welds after welding eliminates any subsequent deformation; this is explained by the acceleration of the decomposition process of the retained austenite due to the enlarged plastic deformations.

1. Welded structures--Deformation--Test results

G. A. Nikolayev

2. Steel--Deformation--Welding effects 3. Welds--Deformation--Effects of peening

Card 2/2

OL'SHANSKIY, N.A., kandidat tekhnicheskikh nauk; MORDVIUTSEYA, A.V.,
kandidat tekhnicheskikh nauk.

Automatic arg deposition of brass on steel. [Trudy] MYTU no.37:
136-144 '55. (Brass plating) (MLRA 9:6)

MORDVINTSEVA, A. V.

137-58-1-827

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 120 (USSR)

AUTHOR: Mordvintseva, A. V.

TITLE: Effect of Decomposition of Residual Austenite on Strains and Internal Stresses in Welds in 23Kh2NVFA Steel (Vliyaniye raspada ostatochnogo austenita na deformatsii i sobstvennyye napryazheniya v svarnykh soyedineniyakh stali 23Kh2NVFA)

PERIODICAL: V sb.: Prochnost' i avtomatizatsiya svarki. (MVTU, 71). Moscow, Mashgiz, 1957, pp 54-63

ABSTRACT: The effect of heating temperature and the rate of cooling of W on the deformation of straight specimens is studied in terms of welded joints (J) of 23Kh2NVFA steel. A change in the magnetic properties of J with the passage of time and the distribution of the internal stresses (S) across the cross section of J has been established. The method of investigating the deformation consisted of the following: straight specimens were heated by the passage of an electric current through them; the heating cycle was recorded. After cooling, one end of the sample was then mounted in a jig, while a deformation measuring device was mounted on the other, and deformations occurring in the

Card 1/3

137-58-1-827

Effect of Decomposition of Residual Austenite (cont.)

space of 100 hours at room temperature were measured. The maximum deformation was obtained after heating to a temperature of appx. 1150-1160°, while heating below the Ac3 point did not induce subsequent deformation. The character of the variation of the hardness of the specimens coincides with that of the deformation curve. The effect of W (2.8-11 degrees/sec. at 650°) was determined after the specimens had been heated to 1120°. As W diminished, the deformability of the specimens increased, and hardness declined insignificantly. The effect of tempering temperature on diminishing deformation was determined by means of annular specimens with submerged carbon-arc flash welding of the edges. Steel 30KhGS was tested for purposes of comparison. The tempering temperature was 100, 150, 180, and 200°. Subsequent deformation was brought completely to an end after holding for one hour at 180-200°. The hardness did not change under this condition. The change in the magnetic permeability was determined by means of samples cut from a 10x90x200 mm piece, to the edge of which a stem had been welded. An increase in permeability was found and measured over a period of 9 days. This testified to the fact that the residual austenite had undergone transformation at room temperature. Investigation of the distribution of the S was conducted on sheets measuring 250x75x3.5 mm, after submerged carbon-arc flash edge welding. Flexing of the piece was measured as the fused edge underwent gradual abrasion, and the magnitude of the S was calculated

Card 2/3

137-58-1-827

Effect of Decomposition of Residual Austenite (cont.)

therefrom. A layer of up to 2 mm was taken off in the course of ≤ 12 hours. In a region distant from the stem, the method used was the cutting of a section and the measurement of the length of the base. For purposes of comparison, curves of the S of Nr 3 steel and 1Kh18N9T steel were determined. Significant S of compression - 20 kg/mm² were found in the weld metal of 23Kh2NVFA steel. In the region adjacent to the weld the tensile S reached σ_s and came to 60-70 kg/mm² (the range in which the appearance of cold cracks is possible). Peening of welds reduces tensile S to 30-40 kg/mm² by enlarging the regions of tension.

V.B.

1. Welds--Strain 2. Welds--Stress 3. Welds--Deformation 4. Welds--Test methods 5. Welds--Test results

Card 3/3

~~AND~~ MORDVINTSEVA, A. V.

137-58-1-813

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 1, p 118 (USSR)

AUTHORS: Ol'shanskiy, N. A., Mordvintseva, A. V.

TITLE: Methods of Improving the Properties of the Weld in Low-Alloy Bronzes (Nekotoryye metody uluchsheniya svoystv metalla shva nizkolegirovannykh bronz)

PERIODICAL: V sb.: Prochnost' i avtomatizatsiya svarki (MVTU, 71).
Moscow, Mashgiz, 1957, pp 74-92

ABSTRACT: A study is made of the effect of heat-treatment during peening and of alloying upon the quality of welded compounds of Cu and of low-alloy bronzes, as well as of automatic carbon arc flux welding upon the mechanical properties of the weld metal at elevated temperatures. It was found that the nature of the crystallization of the weld can be controlled by changing the type of backing material used in welding Cu. Welding over a cooled graphite Cu backing provides better crystallization of the weld and superior mechanical properties. Heat treatment alone does not guarantee that welds will be of the required properties. The best changes in macro- and microstructure and improvement in hardness properties of welded joints are

Card 1/2

ВАЛДЫЕВ, С. Н. (Инж.) and МОРДВИНОВА, А. В. (Candidate of Tech. Sci.)
2

"Technology of Welding Steel Alloys in Gas Shields,"

paper presented at All-Union Scientific-Technical Conference on Welding in Shielding Gases, Leningrad, Dec 1957.

(Svarchnoye Proizvodstvo, 1958, No. 4, pp 46-47 - author Tyul'kov, M. D.)

Reports of the Interuniversity (Cont.)

927

COVERAGE: This is a collection of technical papers and reports presented by the representatives of various educational, industrial, and research organizations at the 1956 welding conference. They deal with problems of strength of welded connections and structures, automatic arc and resistance welding of steels, and nonferrous metals and alloys. No personalities are mentioned. There are 109 references, 95 of which are Soviet, 12 English, and 2 German.

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Reports of the Interuniversity (Cont.)

927

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Cold Cracks in Zones Thermally Affected by Welding 76

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GO/hcr
12-15-58

135-58-7-1/20

AUTHOR: Nikolayev, G.A., Honored Scientist, and Mordvintseva, A.V.,
Candidate of Technical Sciences

TITLE: Welding Martensite Steel Turbine Parts (Svarka detaley turbin
iz martensitnoy stali)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 7. pp 1-5 (USSR)

ABSTRACT: Information is presented on a series of experiments carried out
at the MVTU imeni Bauman, on the basis of which the welding
technology for joining 2X13 steel blades to turbine disks was
developed. The electrode material finally chosen is "E 654".
Chemical composition of metals and seams is also given. The
tests proved high mechanical properties of welds produced in
carbon dioxide; no cracks were revealed. A special installation
with a clamping device was designed for the welding operation.
The method described was brought into use at the plant where
the tests had been carried out.
There are 7 graphs, 3 tables and 4 Soviet references.

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Welding Martensite Steel Turbine Parts

135-58-7-1/20

ASSOCIATION: MVTU imeni Bauman

1. Steel-Welding 2. Welding electrodes—Applications

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SOV-125-58-10-9/12

AUTHORS: Ol'shanskiy, N.A., Korvintseva, A.V., and Krutbol'dt, L.N.

TITLE: The Use of Ultrasound in Seam and Spot Welding (Ispol'zovaniye ul'trazvuka dlya shovnoy i tochechnoy svarki)

PERIODICAL: Avtomaticheskaya svarka, 1958, Nr 10, pp 76 - 77 (USSR)

ABSTRACT: The authors present information on investigations carried out together with Engineers L.V. Karaseva and Yu.N. Zorin by MVTU and MEI on the use of ultrasound in welding practice, and on the first results obtained in this field. The information includes descriptions of the experimental devices, i.e. a machine for ultrasonic spot welding, the basic part of which is a magnetostriction converter (Figures 1,2) and a machine for ultrasonic seam welding, the basic parts of which are a magnetostriction converter and a waveguide. To obtain a concentrated source of ultrasonic oscillations, waveguides of different design were tested (stepped, conic exponential and catenoid shapes). Best results were obtained with waveguide of exponential shape. Tests were performed on ultrasonic spot welding of aluminum and its

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The Use of Ultrasound in Seam and Spot Welding

SOV-125-56-10-3/12

alloys up to a thickness of 1.5 mm and of plastics up to 0.8 mm in thickness. Welding of similar and different metals (aluminum with copper, copper with stainless steel, etc.) was successfully performed. It was stated that soft metals are easier to weld than hard metals. Special tests were carried out to determine maximum temperatures produced by ultrasonic oscillations in different metals under different pressure. It was stated that metal properties and pressure affect the character of the thermal cycle and the maximum temperature values. Investigations of the strength of spot and seam welded joints proved that

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The Use of Ultrasound in Seam and Spot Welding

30V-125-58-10-9/12

the strength of weld joints depends on the duration of the ultrasonic oscillation passage and on the electrode pressure. In all cases of seam welding, the strength of the weld joint exceeded that of the base metal. There are 5 sets of photos, 2 diagrams and 2 graphs.

ASSOCIATION: MVTU imeni Baran and ML

SUBMITTED: April 18, 1953

1. Metals--Welding 2. Acoustics--Welding 3. Ultrasonic
rad. 4. Welds--Effectiveness

Card 3/3

SOV/125-58-11-4/16

AUTHORS:

Ol'shanskiy, N.A., Mordvintseva, A.V., Gorin, Yu.N., and Kachalov, V.M.

TITLE:

Chambers with Controlled Atmosphere for Welding Active Metals
(Kamery s kontroliruyemoy atmosferoy dlya svarki aktivnykh metallov)

PERIODICAL:

Avtomaticheskaya svarka, 1958, Nr 11, pp 32-36 (USSR)

ABSTRACT:

The MVTU and MEI welding laboratories, under the supervision of Professor G.A. Nikolayev, designed hermetic chambers filled with inert gas for the fully mechanized welding of zirconium, molybdenum, titanium, etc. The use of automatic welding heads inside the chambers ensures a most accurate control of the arc voltage, and the welding process is controlled from a special desk. The following devices are described in detail: 1) an installation for welding in controlled atmosphere consisting of a chamber, a prevacuum pump, a control desk and a vacuummeter (Fig. 1) for welding specimens up to 300 mm length; 2) an installation for the welding, in controlled atmosphere, of large-size specimens with the use of a movable welding head and a vacuum line with a pump system. Contrary to foreign

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SOV/125-56-11-4/16

Chambers with Controlled Atmosphere for Welding Active Metals

models, the electric motors are placed inside the chamber, thus simplifying the welding process and permitting the design of large-size chambers. Zirconium and molybdenum specimens were successfully welded in the described installations. There are 3 photos and 1 circuit diagram.

ASSOCIATION: MVTU imeni Paumana i MEI (MVTU imeni Pauman and MEI)

Card 2/2

MORDVINTSEVA, A.V.

PHASE I BOOK EXPLOITATION NOV/3528

Moscow. Dom nauchno-tekhnicheskoy propagandiy

Primeneniye ultrazvuka v promyshlennosti; sbornik statey (Industrial Use of Ultrasound; Collection of Articles) Moscow, Mashiz, 1979. 302 p. 8,000 copies printed.

Sponsoring Agency: Obshchestvo po rasprostraneniye politicheskikh i nauchnykh znaniy ASPER.

Ed. (Title page): V.F. Widorov, Doctor of Physical and Mathematical Sciences, Professor; Ed. (Inside book): G.P. Kochetova, Engineer; Techn. Ed.: V.D. El'kind; Managing Ed. for literature on Machinery and Instrument Manufacturing (Mashiz): M.V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for engineers and technicians engaged in the application of ultrasonics in machinery manufacture and in other branches of industry.

OVERVIEW: This is a collection of papers read at the first all-Union conference on the use of ultrasonics in industry. Attention is focused mainly on the description of ultrasonic equipment and on the use of ultrasound for the machining of hard materials and for flaw detection. The effect of ultrasound on metal-crystallization processes is also discussed. No personalities are mentioned. References accompany many of the papers.

Grekov, M.A., Methods of Industrial Quality Control of Metal for Turbogenerator Rotor Forgings ("Elektrosila" Plant imeni S.M. Kirov)

Podolskiy, Yu.V., Engineer. Ultrasonic Generators Developed at the GSP "Kiy avtosavod (Dor'kiy Motor-Vehicle Plant)

Olschanskiy, N.S., Candidate of Technical Sciences; and A.V. Mordvintseva, Candidate of Technical Sciences. Applications of Ultrasound in Welding

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25(1)

SOV/155-59-5-2/21

AUTHOR: Mordvintseva, A.V., Candidate of Technical Sciences, Ol'shan-
skiy, N.A., Candidate of Technical Sciences

TITLE: Methods of Welding Active Metals

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 5, pp 4-7 (USSR)

ABSTRACT: Work was carried out on methods of welding active metals in the MVTU and MEI under the direction of Professor G. A. Nikolayev, Honored Scientist and Engineer, Corresponding Member of the Akademiya stroitel'stva i arkhitektury (Academy of Construction and Architecture), Doctor of Technical Sciences. Engineers Yu. N. Zorin and V. M. Kachalov also took part in the work, in which two methods were examined: 1) welding in a protective gas medium; 2) welding in a vacuum with an electron beam. Arc welding in inert gases was tried first with an automatic head with an infusible electrode developed by MEI; with this method it was possible to weld longitudinal seams of tantalum tubes with walls 0.2 mm thick and a diameter of 18 mm; however, it was impossible to weld other active and infusible metals satisfactorily because of insufficient protection of metal heated to dangerous temperatures.

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Methods of Welding Active Metals

Welding with gas protection in small mobile chambers (Fig 1), each chamber fastened to an argon-arc burner, was found to be unsatisfactory. Welding with the use of hermetically sealed chambers with an inert atmosphere was then tried; for this purpose a small laboratory chamber was produced. The entire unit (Fig 2) consists of a chamber, a pre-vacuum pump, a booster pump, a control desk, a vacuum meter, and a few vacuum valves. The interior of the chamber is shown in Fig 3, from which it will be seen that in contrast to chambers of foreign design the motors for moving the articles and electrodes are housed inside the chamber, which also contains an MEI NZ-8 automatic head. Using this chamber, welded joints of some active metals of a thickness of up to 2 mm were obtained. Results were satisfactory, providing the metal and the inert gases were clean enough, but it was not possible to weld some infusible metals properly. Vacuum welding with an electron beam is then discussed. In this method, the surface of the metal to be welded is bombarded with fast-moving electrons in a high vacuum, the resultant heat being used to fuse the

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Methods of Welding Active Metals

metal. The device used is shown schematically in Fig 5. It consists mainly of a vacuum chamber containing an electron gun (designed by Candidate of Technical Sciences N. G. Sushkin) consisting of a cathode in the form of a wolfram spiral, the anode being the article to be welded. The entire unit is shown in Fig 6. The vacuum chamber is 600 mm in diameter and 1 metre long. In its upper part are the electron gun and the vacuum electric lead, the vacuum system being placed beneath the chamber. The electron gun (Fig 7) can create a powerful electron beam with a voltage of up to 100 kv. It consists of a chamber on which a three-petticoat insulator is attached. The insulator contains the holder of the cathode, placed in the center of the chamber. Under the cathode is the first anode with a hole for the electron beam, the article itself being the second anode. In this chamber, specimens of very active metals of up to 2 mm thickness were welded; the vacuum was 10⁻⁴ mm of mercury column, voltage at the cathode 25 kv, the current of the electron beam reached 40 ma, speed of welding 5 metres per hour, power of the electron beam 1000

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SOV/135-59-5-2/21

Methods of Welding Active Metals

watts. The seams were found to be of high ductility and free of any defects. The positive factors of welding by an electron beam in a vacuum are summarized as follows: 1) absence of electrodes; 2) high degree of vacuum; 3) absence of influence of external forces; 4) possibility of wide regulation of the temperature and concentration of the source by a focusing lens; 5) possibility of obtaining any temperature in the anode spot; 6) possibility of removing volatile admixtures from the metal; 7) high welding speed. It is suggested that this method could be widely used in the fabrication of vacuum devices. There are 5 photos, 2 diagrams and 3 English-language references.

ASSOCIATION: MVTU im. Bauman (MVTU imeni Bauman)

Card 4/4

MORDVINTSEVA, A., kand. tekhn. nauk; OL'SHANSKIY, N., kand. tekhn. nauk

Ultrasonic welding of metals and plastics. NTO no.6:32-33 Je '59.
(MIRA 12:9)

(Ultrasonic waves--Industrial applications)
(Welding research)

15(8)

SOV/135-59-9-11/23

AUTHORS: Ol'shanskiy, N. A. and Mordvintseva, A. V., Candidates
of Technical Sciences

TITLE: Supersonic Welding of Plastics

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 9, pp 30-33 (USSR)

ABSTRACT: The authors present some facts on a new method of welding plastics. This method has been worked out in 1958 by the Department "Svarochnoye proizvodstvo" (Welding Production) of IVTU under the supervision of the Corresponding Member of the Academy of Building and Architecture G. A. Nikolayev. The method is based on the use of supersonic vibrations. In supersonic welding the magnetostrictive effect is used, concluding in the change of the dimensions of ferromagnetic materials under the influence of an alternating magnetic field. The following materials can be used for magnetostrictive appliances: nickel, stainless steel, and some alloys: "Permendur" and "Permalloy". Positive results of investigations on supersonic welding made by IVTU and MEI were used [Ref 1 and 2]. On samples of "Vini-

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Supersonic Welding of Plastics

plast" and organic glass, with a thickness up to 10 mm, lap joints and T-shaped joints were welded. The conditions are shown in the table. Fig 5 shows the machine type PUT-2 for supersonic spot welding and press welding of plastics, constructed at the MVTU. The advantages of supersonic welding are not within sight yet, but so far it can be said, that the heat concentration on the welded spot exclusively, leads to a high productivity, small energy waste and little changes of the material qualities. Furthermore the welding can be done at sections of different shape and at places which are hard to get at. Engineer L. N. Skorokhodov participated in parts of this study. There are 3 photographs, 2 drawings, 2 graphs, 1 table and 2 Soviet references.

ASSOCIATION: MEI (N. A. Ol'shanskiy) and MVTU imeni Bauman (MVTU imeni Bauman ... V. Mordvintseva)

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PHASE I BOOK EXPLOITATION .

SOV/4810

Nikolayev, G. A., A. I. Akulov, O. N. Bratkova, G. B. Yevseyev,
N. L. Kaganov, A. V. Mordvintseva, and S. T. Nazarov

Svarka (Welding) Moscow, Mashgiz, 1960. 106 p. (Series: Sovetskoye
mashinostroyeniye v 1959-1965 gg.) 4,000 copies printed.

Ed. of Series: I. I. Changli; Managing Ed. for Literature on Heavy
Machine Building: S. Ya. Golovin, Engineer; Ed. of Publishing
House: G. N. Soboleva; Tech. Ed.: G. V. Smirnova.

PURPOSE: This booklet is intended for technical personnel in plants,
Councils of the National Economy, and project bureaus, and may
also be useful to students who intend to work in these fields.

COVERAGE: The authors discuss the development of welding methods in
machine building and civil engineering. The following are con-
sidered: automatic arc welding, electroslag welding, automatic
resistance welding, gas-flame processing, automatic surfacing
of metals, inspection of welded joints, and modern methods of
joining metallic and nonmetallic materials. No personalities
are mentioned. There are no references.

Card 1/2

ADDITIONAL INFORMATION:

[illegible]

сложил приток.

Спонсоризация: Академия наук СССР. Институт машиноведения.

Кемалейя по технологии машиностроения Академия наук СССР.

Институт металлургии и. А.А. Байкова. Институт связи по физическим характеристикам сплавов.

Resp. Ed. I. V. K. Murashin, Academician; Ed. of Publishing House: V. V. Brusilov.

Statement of J. Edgar Hoover

[illegible][illegible]

Printing, To R. Goss-Whitfield Art Building of West-Whitfield Art Co. 121
Kinslayer, Q.A., and A.V. Goss-Whitfield. Building of West-Whitfield Art Co. 121
Steel, ~~Q.A.~~

1. The first step in the process of identifying a problem is to determine the nature of the problem. This involves a thorough understanding of the situation and the factors that may be contributing to the problem.

Punkin, A.V. Two Examples of the Machining of Wear- and Resistant Alloys

Brantley, H.J., machinability of heat-resistant steels and alloys
in machine tooling and drilling with carbide tools

in turning, milling, and grinding with carbide tools.

Resolving Meat-Resistant Stains and Smells
Eurochem, A.S. Investigation of Some Resemblance Factors of
Easily Meat-Resistant Alloy

FRANK A. ELECTRIC-PALE MAGNIFICENT OF NEW-BESTON ALLOYS 201

[illegible]

Notably, *P. p.* Increasing productivity in the feedings of West-
beakless steels and allows with Peace Milling Casters

SAINTON, A. SM. Examples of Foreign Practice in the Supplying of Structural Steel Members and Alloy

RECEIVED BY THE DIRECTOR OF THE FBI

Question, Table. Responsibility of stainless steels in turning.

REPAIRING, and Reaming Operations

tant Materials and Titanium Alloys
Columbus, S.C. - poses questions concerning the machinability of Inconel
Resistant Alloys

S/125/60/000/010/005/015
A161/A133

12300 also 1573

AUTHORS: Ol'shanskiy, N.A., Mordvintseva, A.V.

TITLE: Welding Commercial Molybdenum in Inert Gas

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 10, pp. 36-40

TEXT: Sintered and cast molybdenum was welded in argon with tungsten electrodes. The results of the experiments are given in the article. The formation of cracks made it impossible to obtain well-welded joints in sintered molybdenum in an argon filled chamber. To prevent any contact with air, welding was performed in a sealed chamber already described (Ref.1). The addition of tantalum and titanium as deoxidizing agents proved effective. Foils of these metals were laid between the molybdenum sheet edges. The chamber was hermetically sealed prior to welding, and a 10^{-4} mm Hg vacuum produced inside. Argon was fed into the chamber whilst the vacuum pumping went on, the vacuum system was switched off at 1.1 atm argon pressure in the chamber. The arc was ignited by an oscillator. A thoriated tungsten electrode 2.6 mm in diameter, and current of 75-80 amp and 9 v were used. Welds done with

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Welding Commercial Molybdenum in Inert Gas

tantalum foil had no cracks but pores, apparently caused by the evaporation of tantalum, developed on the surface. The titanium foil gave good quality but very brittle welds. Flawless and bright welds were obtained in cast molybdenum without the above mentioned modifiers. The weld metal (Fig.1) was coarse-grained and its strength varied between 33.3 and 50.4 kg/mm², and was 40-50% below the base metal strength at room temperature. At 250°C the strength of both the base metal and weld metal dropped 30%. The plasticity of welds in cast molybdenum was low (bend angle 5-30°) but a short heating by electron rays in a vacuum up to 800-1000°C increased the plasticity, while the maximum bending angles were 50-90°. The low plasticity was caused by microscopic cracks on the surface of the weld metal (Fig.6). Pickling of the base metal surface improved its plasticity, and grinding raised the plasticity of the joint to 140° bend angle. Professor G.A. Nikolayev supervised the experiments. Engineers Yu.N. Zorin and V.M. Kachalov participated in the work. There are 6 figures and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The English-language publication reads as follows: R.E. Monroe, N.E. Weare, D.C. Martin, Fabrication and Welding of Arc-Cast Molybdenum, "Welding Journal", No.10, 1956.

Card 2/5

8/125/60/000/010/005/015
A161/A133

Welding Commercial Molybdenum in Inert Gas

ASSOCIATIONS: Moskovskiy energeticheskiy institut (Moscow Power Engineering
Institute), (N.A. Ol'shanskiy) MBTU im. Bauman (the MVTU im.
Bauman), (A.V. Mordvintseva)

SUBMITTED: February 23, 1960

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